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COMMUNITY BASED LIVELIHOOD DEVELOPMENT (CBLD) FOR WOMEN AND CHILDREN: COTTON MIDLINE SURVEY

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COOPERATIVE AGREEMENT NO. AID 674-A-12-00003



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ACRONYMS

CBLD	Community Based Livelihood and Development
ECCD	Early Childhood Care and Development
CVC	Cotton Value Chain
SBCC	Social Behavior Change Communications
SRH	Sexual Reproductive Health
TNS	TechnoServe

INTRODUCTION

Community Based Livelihoods Development (CBLD) for Women and Children in Swaziland is a five-year cooperative agreement between USAID and FHI 360, which is supported through our implementing partner Techno Serve, Inc. CBLD integrates livelihoods, gender equality, and child protection interventions with community development approaches to achieve sustainable improvements in the social and economic well-being of women and children in communities in Swaziland.

CBLD implements and supports holistic programming that includes: Education (early childhood education and development, linkages to vocational training/education), Psychosocial support (community caregiver support including Child Protection Networks (CPNs), Rural Health Motivators (RHMs), Lihlombe Lekukhalela (LLs) and other caregivers; Household Economic Strengthening (savings groups, financial literacy, enterprise development, farming as a business and value chain support); Health and Nutrition (nutrition, education, care and support trainings, perma-gardening, community to clinic referral systems); Child Protection and Gender Based Violence programs (education and advocacy for children's rights and appropriate programming, gender norms and legal education clinics); and Legal Protection (birth registrations, improving access to legal services, legal education clinics and high level advocacy for children's and women's rights.). All programming incorporates systems strengthening, access to relevant HIV and Health services and capacity building as key outcomes.

Within the CBLD program, value chain development focuses on increasing the income earning potential of vulnerable households, including female-headed households and those caring for OVC and living with HIV, by introducing them to value chains or improving their position within those value chains.

SURVEY RATIONALE

Specific objective:

To evaluate sustainability of cotton production with Khuphuka and Mpolonjeni farmers under the CBLD Program.

CBLD has been working with cotton farmers in Mpolonjeni and Khuphuka since 2012/2013 planting season. The program has been working with the Cotton Board in implementing all the technical components of production and ensuring that all qualifying cotton farmers have access to credit, chemicals and training.

A baseline survey was conducted in 2013, a random sample selected from the project's initial participants. This baseline (and planned subsequent midline and end line) was initiated as a monitoring tool to support programming decisions and determine effectiveness in the value chain. The information collected at each project stage will be used to help build the evidence base on household economic strengthening programs, potential impacts on the livelihoods and food security of vulnerable households.

METHODOLOGY

Sampling

The cotton association in the two CBLD project areas has approximately 533 cotton farmers, which made it difficult for the program to conduct a census survey of the association's participants. A sample of farmers was selected from all the cotton association active in cotton production under the CBLD program, in Khuphuka and Mpolonjeni.

A list of all the cotton farmers registered in the CBLD database was sourced and it had three different categories of the farmers: Cotton Farmers; Lead Farmers; and Chairman.

All Lead Farmers and Chairmen were selected to be interviewed. The cotton farmers were listed by their association groups and sorted alphabetically in an ascending form, then 30% of the farmers from each association were sampled also ensuring equal gender representation.

Survey Instrument

A questionnaire was developed for all CBLD VC interventions. It was then adapted to the specific VC, irrespective of community and data was collected by CBLD trained enumerators.

The midline survey was modified to capture observations made during program implementation and to reflect programming recommendations made during the CBLD mid-term evaluation (Oct 2014).

These modifications included:

- Adding questions that requested information about household members by sex and age, required respondents to be in position to know the dependants of each farmer.
- Person making final decision on the use of profits made during sales.

Survey Implementation

Farmers were identified through the CBLD database, and the sampling procedures were conducted prior data collection: contact details of the sampled farmers were attained and shared with the data collection team. The associations' chairpersons were contacted prior the visit and informed of the sampled farmers to be interviewed, and he/she also assisted on locating the farmers. In cases where the sampled farmers were not reached and where possible, a replacement was sought.

The CBLD data collection team consisted of seven enumerators, with one identified as a lead enumerator. Mobile data collection was the main method to ensure ease of data collection.

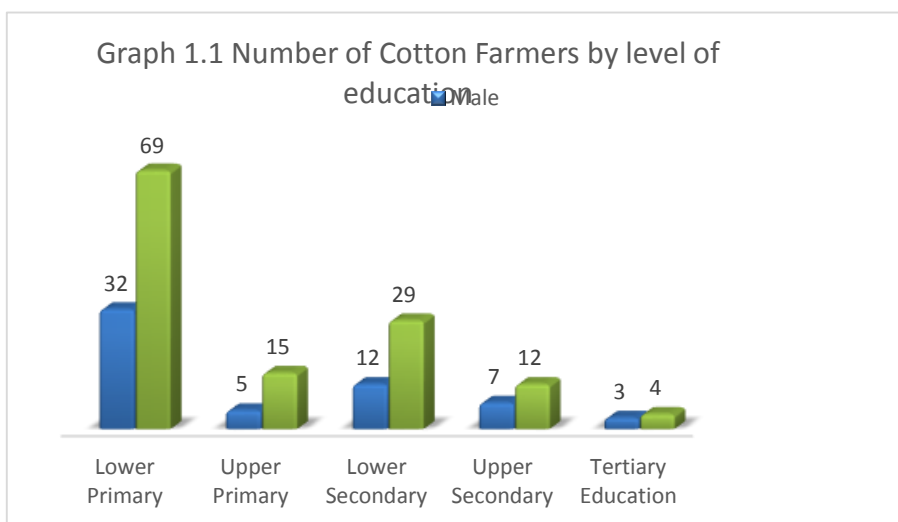
Questionnaire Content

1. Demographics
 - Farmers name, sex, and contact details
 - Farmers education background
 - Farmers list of household members
2. Cotton Production Season
 - Participation of farmer during production season
 - Cotton board identification number and association name
 - Trainings received by the farmers
 - Cotton crop management
 - Revenues received from sales of cotton
 - Decision making on the profits made from the sales
 - Usage of the money received from sales¹

DEMOGRAPHIC INFORMATION

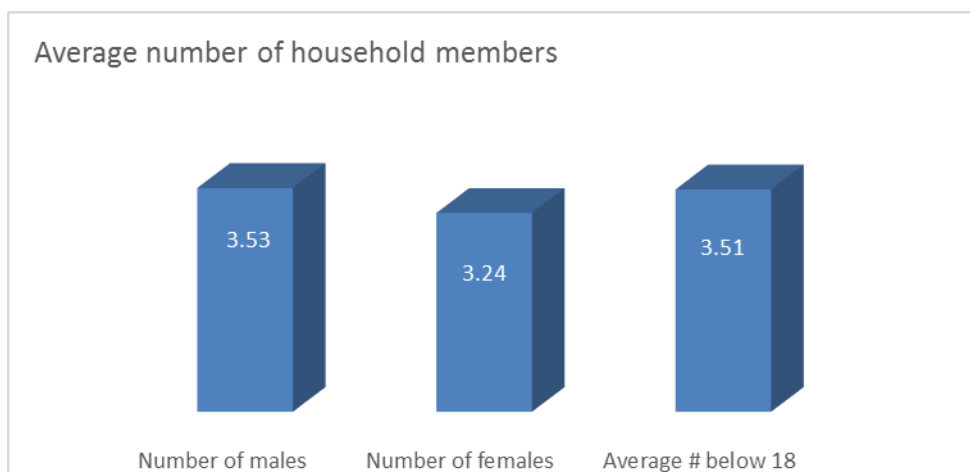
A total of 226 farmers were reached during the survey. Of which 158 were female farmer (70%) and 68 were male (30%) Out of an initial sample of 267 selected from a total of 533 CBLD CVC program (85% of the sampled farmers were interviewed, with only 15% not reached). A majority of the farmers have a minimum of lower primary education indicated by 121 (54%) farmers have attended the lower level of education.

¹ Decision making and usage of profits can have a different outcome: a decision can be taken jointly and eventually use the finances differently



Household members living with farmer

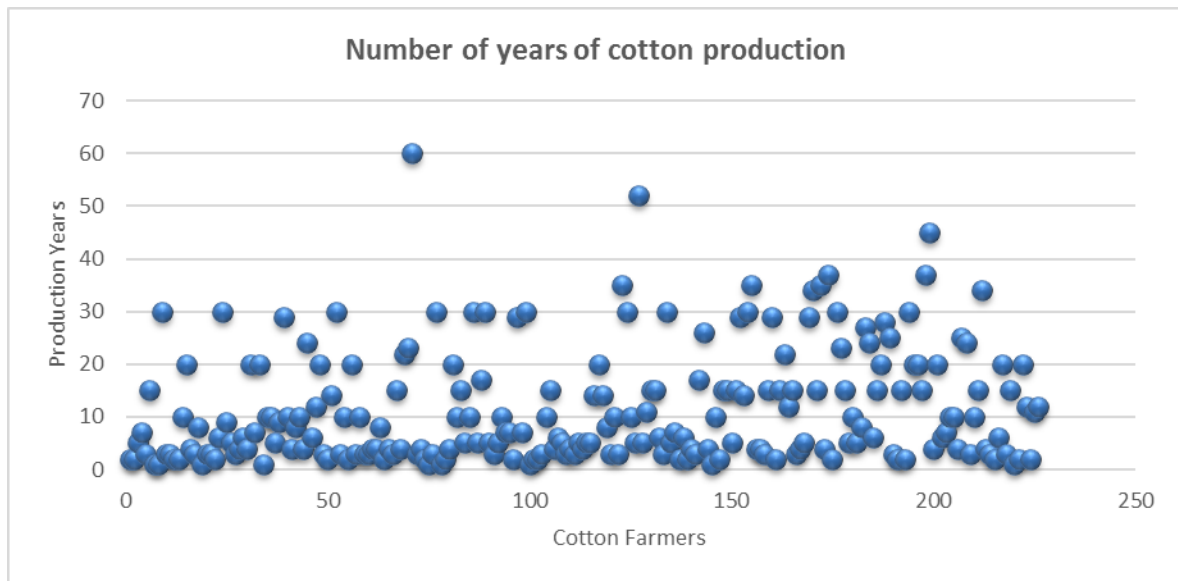
Almost half of the farmers' household members are below the age of 18 years: the 226 farmers reported that they are caring for 1435 household members, with 709 (49%) below 18 years of age. About equal average number of household members live in the household (see graph 1.2 below).



COTTON FARMING STATUS

Cotton Production Season

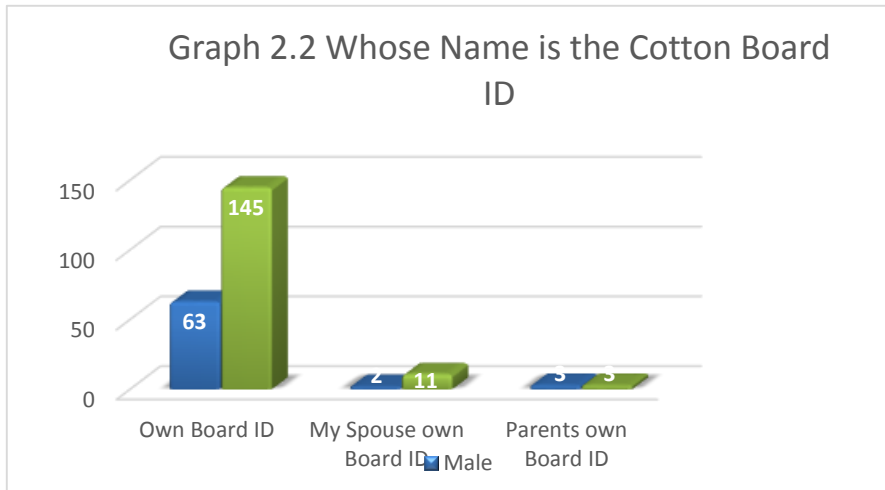
On average the cotton farmers have been in cotton production for 11 years, with a 78 year old farmer reporting to have been in cotton farming for 60 years and some have participated in the production for less than a year.



Many of the respondents, 217 (96%), grew cotton in the 2013-2014 production season showing an 11% increase from the 2012-2013 cotton production season (85% grew cotton in the 2012-2013 season). A total of 24 of the 26 female farmers that did not grow during the 2012-2013 production season, managed to grow during the last season.

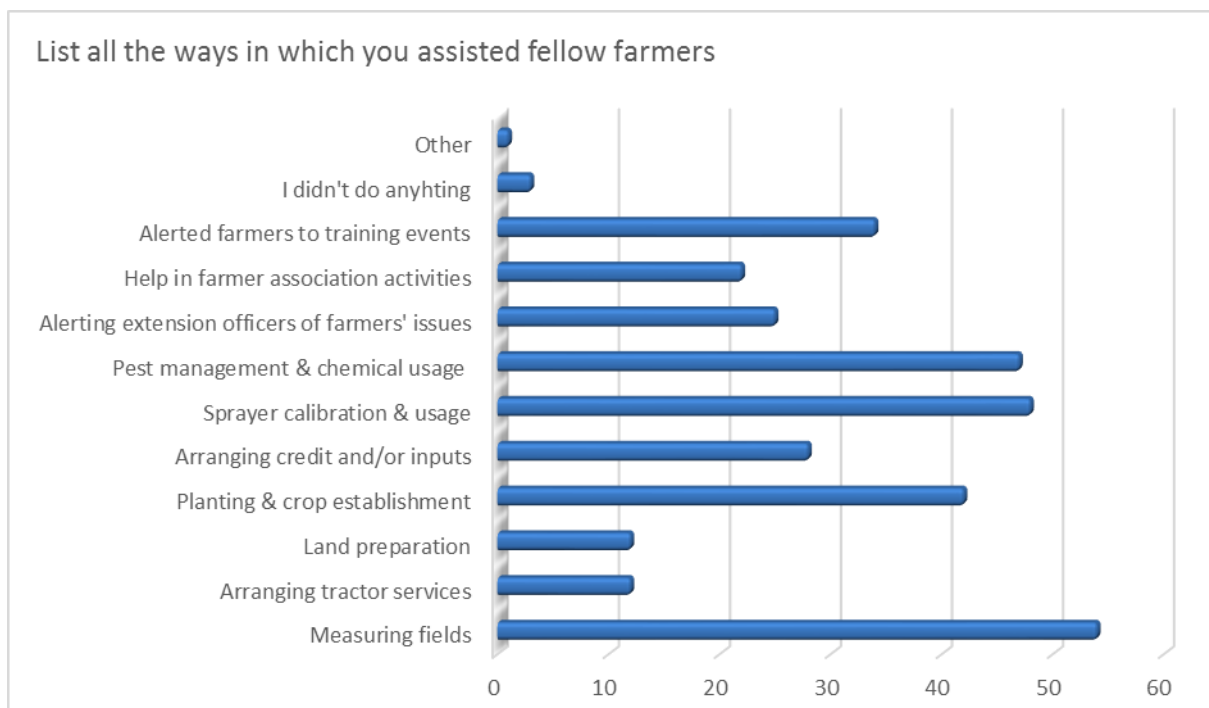
Association names and Board ID

For many respondents, 206 (92%) stated that the cotton board ID is in their own name, which means they directly benefit from any profits made from cotton production. Of those that own the cotton board ID 143 (69%) of them are female, implying that there are more than 50% assumed to have access to cotton production profits. However it is worth noting that there are males that have shared that they have their wives owning the cotton board ID, though most females (11) than males have their spouses owning the ID.



Lead Farmers and Farmers Trainings

Almost all the lead farmers in the program were reached 78 (95%) with 47 females, and 71 of them have Cotton Board IDs in their names. The lead farmers have trained an average of 13 farmers (range 0 to 170), most assistance given was on fields' measurement, pest management, chemical usage, sprayer calibration and usage. A total of 172 (76%) of the farmers reported that they have lead farmers assigned to them.



The interaction between lead farmer and farmer was either mostly initiated by lead farmers, or was equally initiated by the farmer and lead. Which implies that there is a beneficial working relationship between the farmers, Most lead farmers interacted with other farmers at a community gathering/public place followed by the lead's or the farmer's farm.

Who initiated training interactions between lead farmer-farmer? (n78)		
	Frequency	Percent
Lead farmer 100%, farmers 0%	4	5
Lead farmer 75%, farmers 25%	32	41
Lead farmer 50%, farmers 50%	36	46
Lead farmer 25%, farmers 75%	4	5
Lead farmer 0%, farmers 100%	3	3

Mirroring the responses of the lead farmers, farmers said they met their lead farmer at a community gathering or public place, and on their farm. Many respondents travelled less than 1 hour to receive training and assistance from their lead farmer.

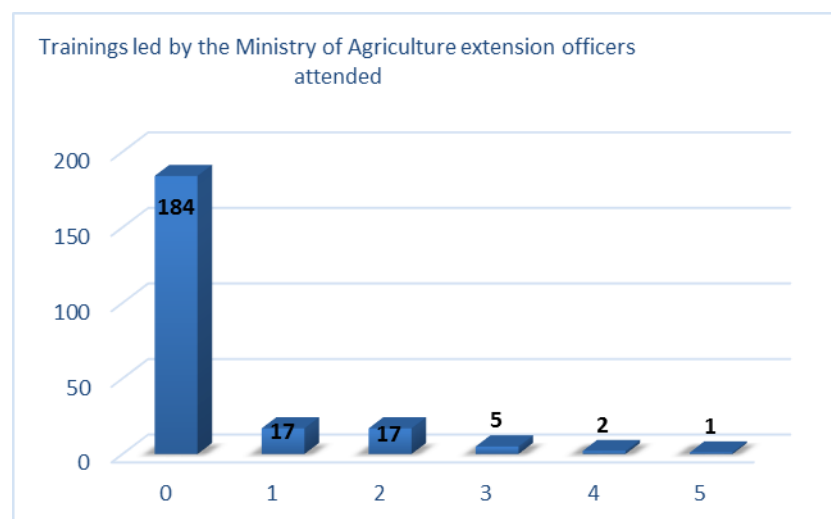
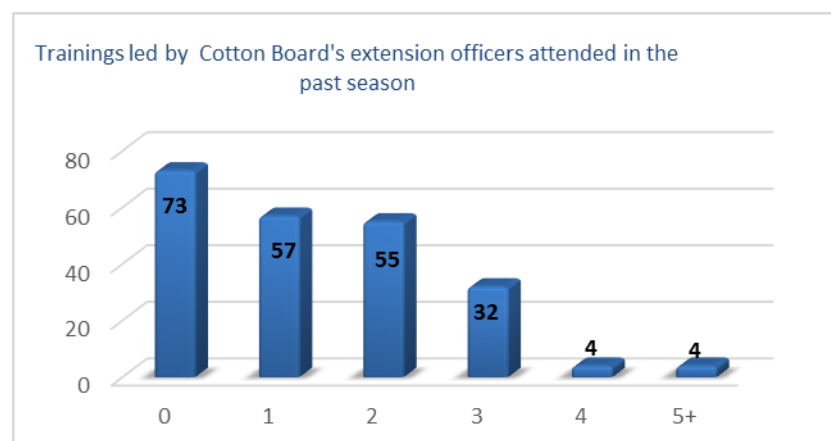
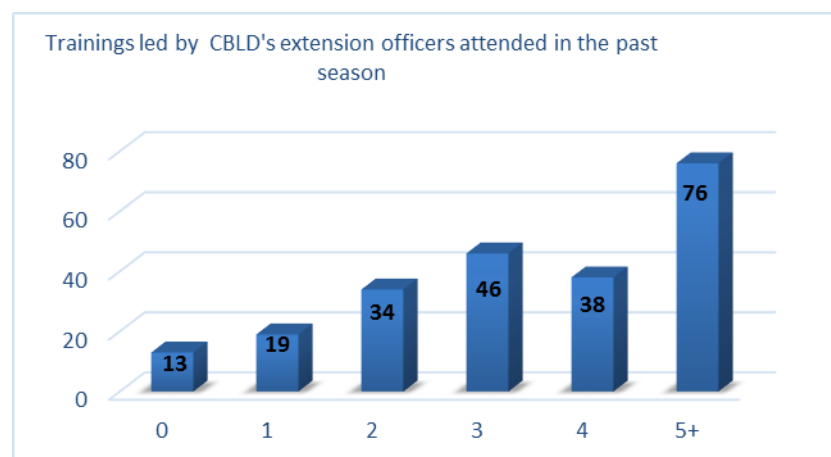
Travel time to receive training and assistance from lead?		
	Frequency	Percent
0-30 minutes	110	48.7
30 - 1 hour	46	20.4
1 - 2 hours	17	7.5
> 2 hours	3	1.3
Other	50	22.1

Almost all the lead farmers 74 (94%) shared that they shared training information received from TechnoServe to their fellow farmers. Which indicates that training lead farmers is highly effective and serves as a quick and easy way of reaching the farmers, as 156 (87%) of the farmers stated that they receive useful information from the lead farmers.

I disseminated TechnoServe training information to my fellow farmers (n78)		
	Frequency	Percent
Strongly agree	36	46
Agree	38	49
Neither agree nor disagree	0	0
Disagree	3	4
Strongly disagree	1	1

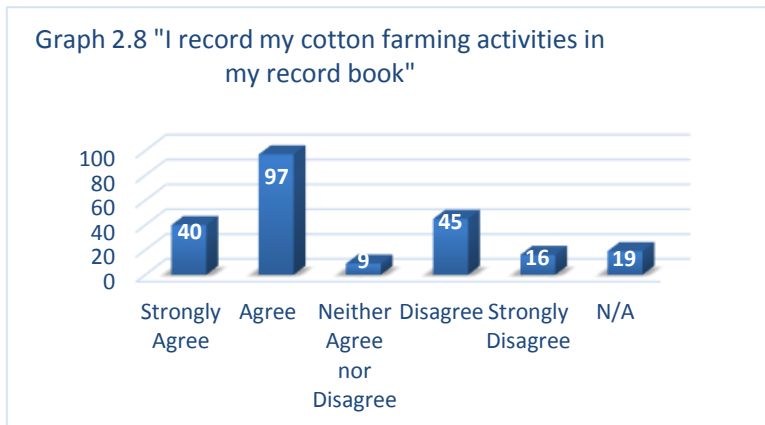
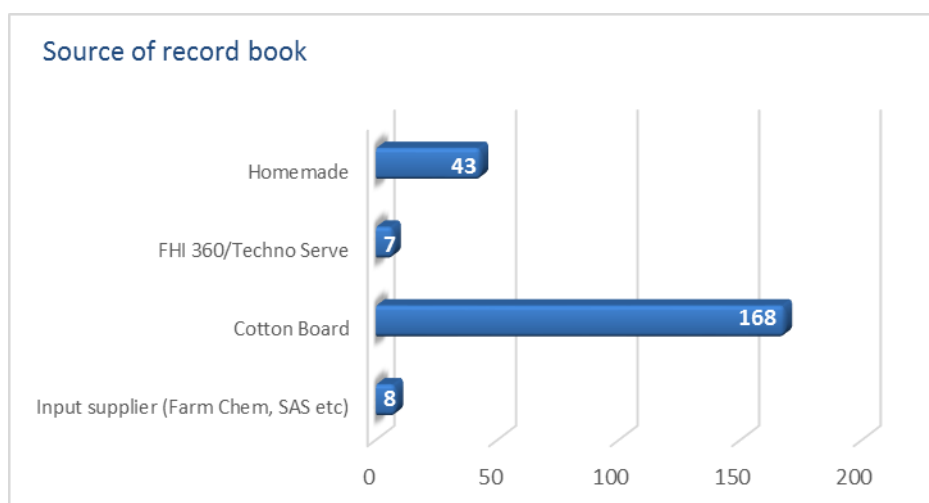
Trainings

Worth noting that 76 (33%) of the farmers have participated more than 5 times in trainings conducted by CBLD, compared to trainings organized by the Cotton Board and the Ministry of Agriculture. Which highlights the high dosage the program has managed to provide through numerous follow-up trainings with the farmers, compared to the Board who infrequently reach the farmers. This also presents an opportunity for other CBLD programming to take effect during these trainings.



Record Keeping

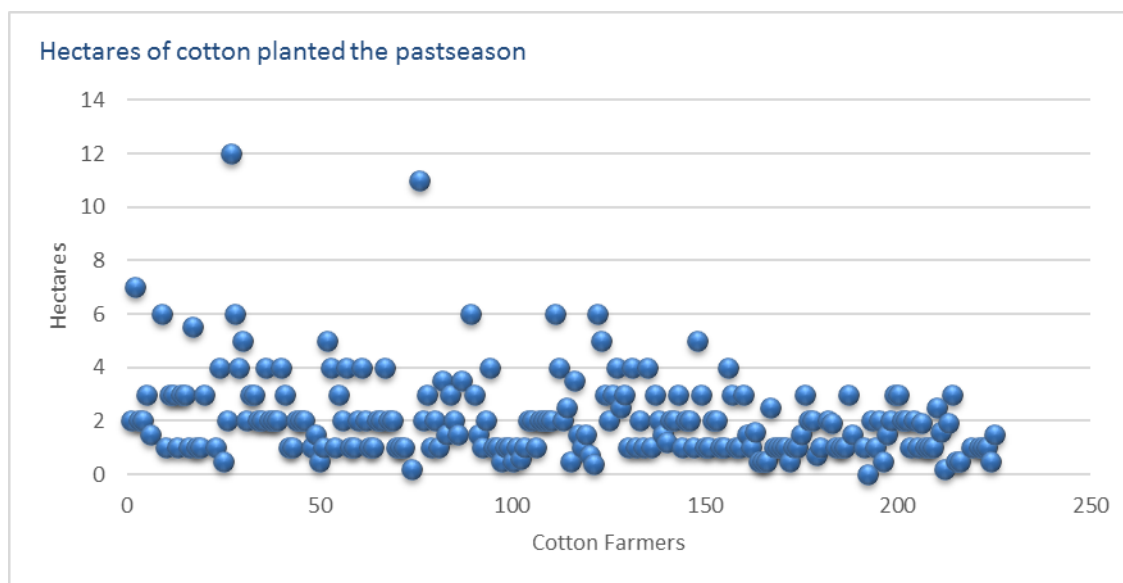
Most respondents received their record book from the Cotton Board, while a substantial number were also using a homemade record book. Irrespective of where the farmers get their record books it is worth noting that 137 (61%) of the farmers record their farming activities, which means they are able to monitor their production. However there is still a need to reinforce the importance of keeping records.



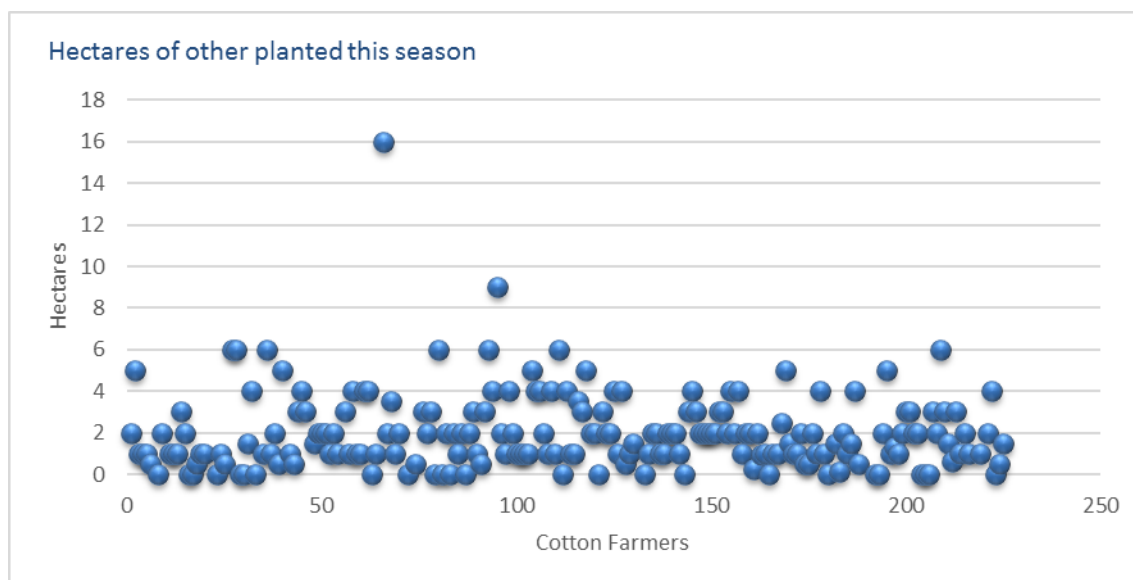
Size of land cultivated

As shown in the scatter plots, on average, respondents owned 5.0 hectares of land, of which respondents planted with cotton an average of 2.1 hectares and 2.0 with other plants. Respondents also reported that they left an average of 1.2 hectares of land uncultivated. Many respondents determined the size of their land by measuring the land; 126 farmers (56%) and 109 farmers (48%) reported to be using the number of tractor ploughing hours to know the size of their land.

Graph 2.9



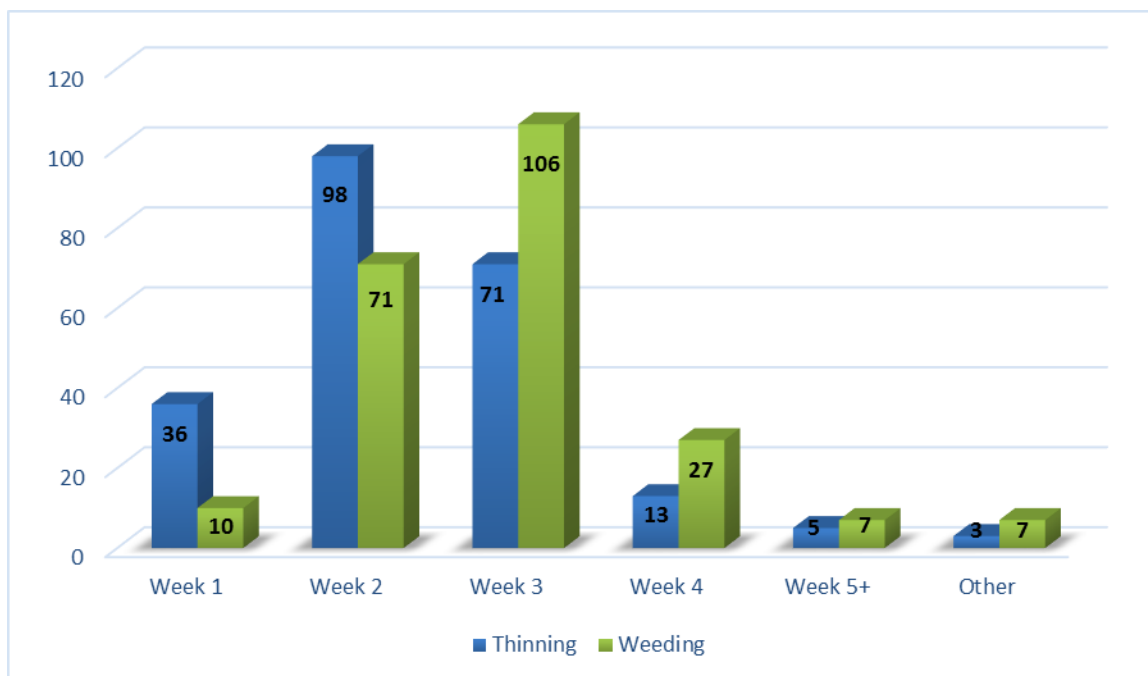
Graph 2.10



Cotton yield management

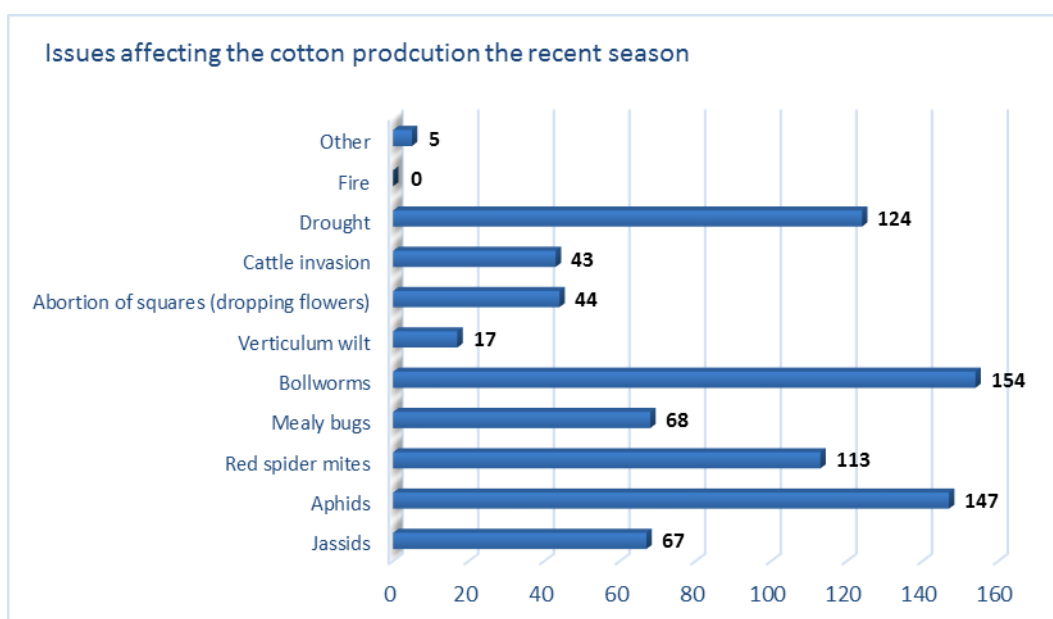
Cotton farmers seem to be well aware of the management of the crop as 205 (91%) reported to be thinning their crops within the first 3 weeks and during the same weeks 187 (83%) of them weed the crop.

Graph 2.11



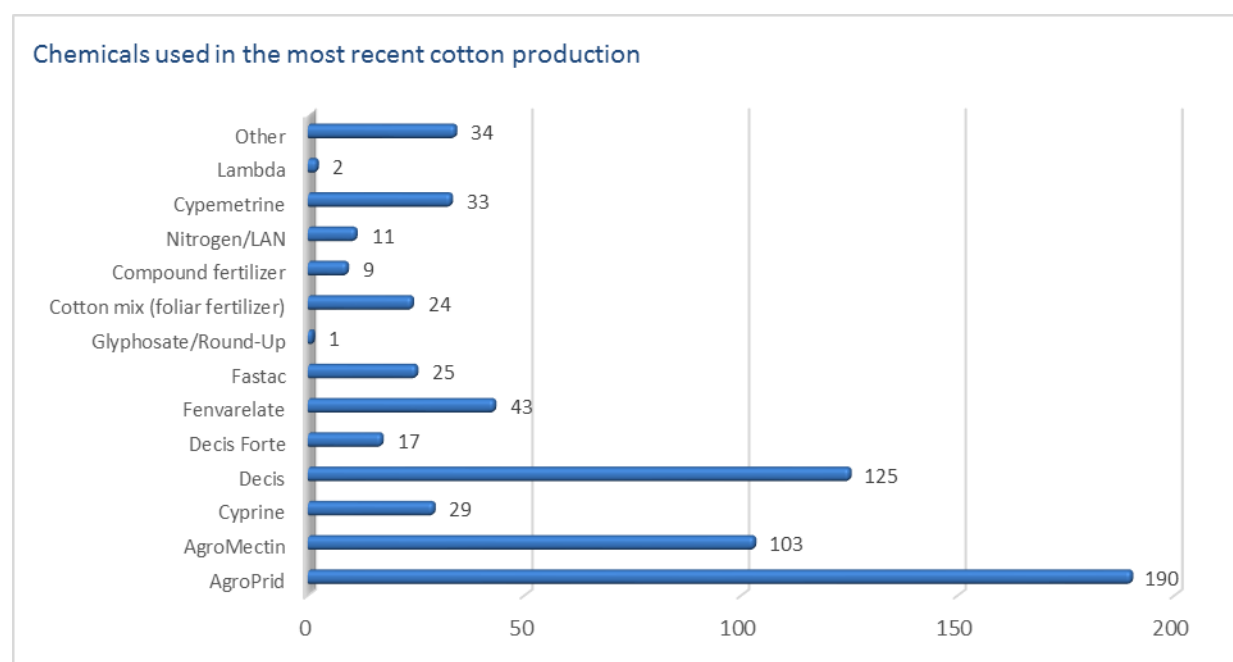
At least 191 (84.5%) of the farmers reported to have the skills and know how to calibrate their sprayers thus making it easy for them to provide the necessary chemicals for their cotton when appropriate. This means that they have less reliance on other farmers when they want to manage their cotton crops.

Aphids, Bollworms, red spider mites and drought have been reported by farmers to be the issues affecting production and at none stated fire to be an effect.



The most used chemical is AgroPrid to remove aphids and jassids, Decis for ball worms and AgroMectin for red spider mite.

Graph 2.13



COTTON PRODUCTION

Many of the respondents, 170 (75 %) reported that they sorted and packed their cotton according to quality grades.

Cotton production workers

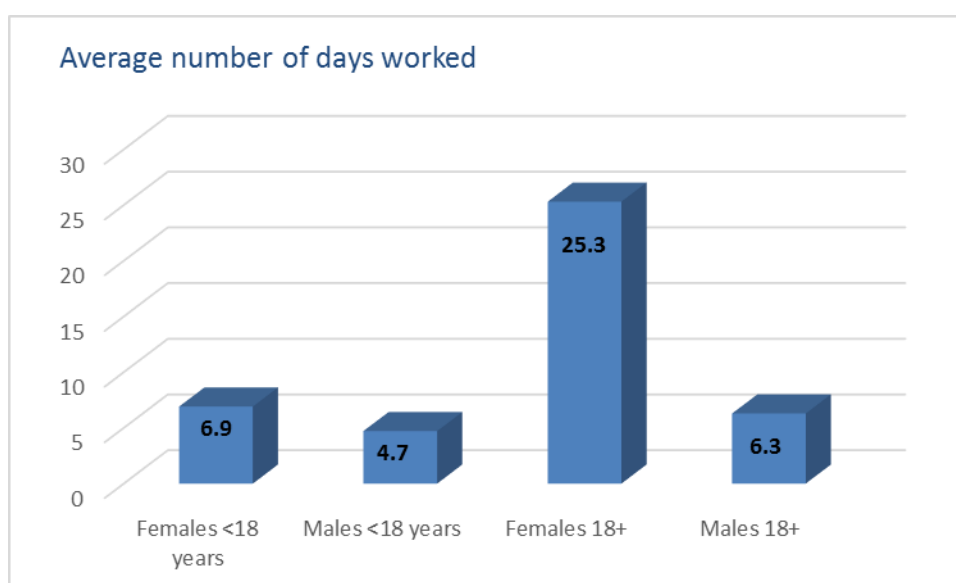
Many of the farmers said a household member worked on the cotton production, mostly female and male household members over 18 years of age. Moreover, an average 1.5 household members participated in the cotton production. Total of 78 (35%) farmers reported to have hired non-family members, while 62% shared that they hired family members. This validates the CVC as an enterprise that is appropriate for stabilizing households and providing for their livelihoods.

Graph 3.1



When asked how long the household members worked on the cotton production, depending on the age and sex of the household member they worked on average from one month to two months.

Graph 3.2



Most farmers hired family members to work on the farm but a few did hire a non-family member (35 percent). Similar to the family members helping on the farm, most of the hired help were women over 18 years of age and the same group seems to spend the most amount of time working on the farm (25.3 days). This further reinforces the cotton value chain's benefit to women.

The survey showed that farmers do not use the same procedure when paying for labour as for weeding/thinning some farmers pay by considering the number of lines completed, some per day and some per hour. Thus it is not easy to make comparison on the payments made for weeding/thinning, however the average amount paid per worker regardless of work conducted is E33.00.

Labour payment for harvesting cotton is also not standard amongst the farmers: some pay based on the cotton bag filled and some use total kilograms harvested, but the average price paid is E23.00.

Land preparation

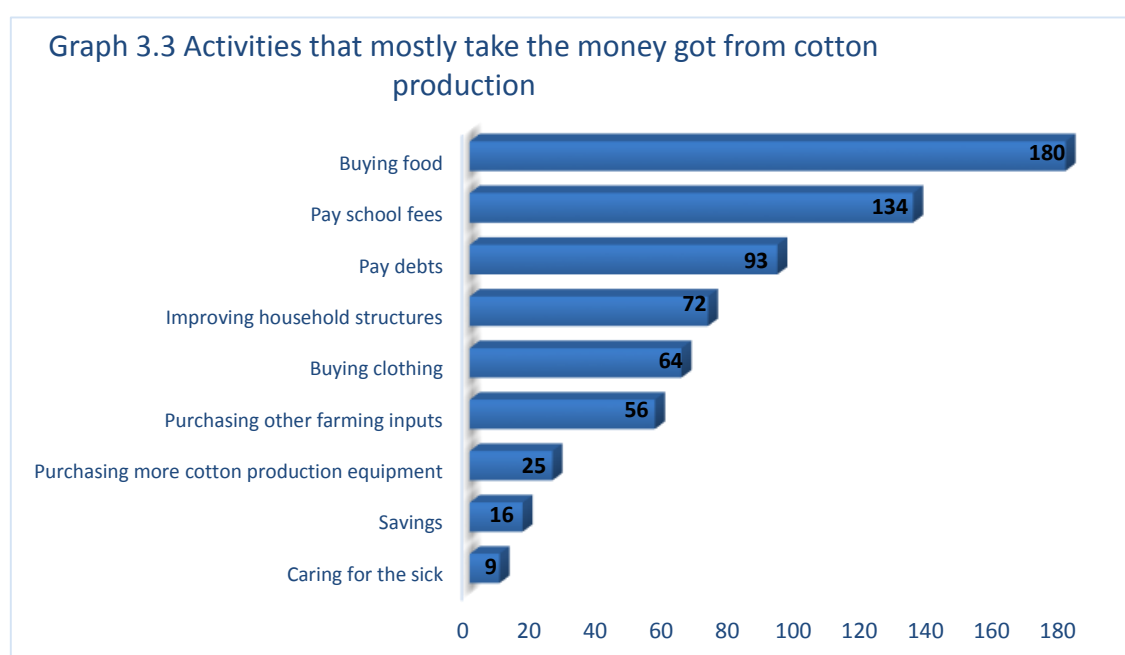
More than half of the farmers 199 (56%) hired mechanized labour for their cotton fields, spending E50 170.00 for the service: 116 farmers hired private tractor service, 53 farmers used government tractors and only 39 farmers own and used their tractors.

Some farmers used livestock, 57 (25%) and of these farmers only 36 of them used their own livestock, which means 21 farmers had to hire the livestock. Those using livestock reported to be paying a maximum of E400.00 per hectare and E300.00 per hour² worked, yet the maximum money paid by for mechanized labour is E750.00 per hour.

Decision making and use of profits

It is exciting to note that some farmers reported to be making the final decision on how to use the profits made from the cotton production collectively with their spouses. 195 (86%) farmers reported to be making decisions on their own and 32 female farmers that have their husbands making the final decision.

One farmer shared that some of the profit made from the production he bought a vehicle and another state that he bought livestock, however the money is mostly used for: paying school fees, buying household food, and paying debts.



² Amount estimated per hour and hectare cannot be combined as this may have numerous factors.

As a result of the cotton value chain, cotton farmer's feel they have economic independence and they do not rely as heavily on someone else to provide for their livelihood. However it is worth noting that there is still six farmers who mention that they still have less disposable income.

CBLD Assistance Rating	Number of Cotton Farmers
I am now recognized by the community (gained respect)	69
I am now recognized in the household	60
I have more disposable income	68
I have less disposable income	6
Have economic independence (no more rely on someone else in most things)	128

RECOMMENDATIONS

Based on the findings of the mid-line survey, the following recommendations are made to improve/develop the livelihood of cotton farmers.

1. Increase CBLD dosage during CVC trainings

TechnoServe has proved highly effective at reaching a significant number of cotton farmers through training events and routine monitoring. It would be ideal to couple these trainings with other CBLD programming in order to reach individuals more than once, with different programming segments.

2. Expansion of the tractor hire program

The survey results have indicated that on average farmers leave 24% of land uncultivated during the planting season. This could be a result of a couple of factors including lack of funds to hire tractors, inefficient government tractor system, etc. The Cotton Board tractor hire program proved to be effective, efficient and very helpful in providing tractor hire services on credit and ensuring that fields are ploughed on time. This has translated into greater yields for the farmers who were part of the tractor hire pilot program. Thus it is critical that the Cotton Board considers expansion of the program to benefit all farmers.

3. Improved data capture tools

It is proposed that the CBLD program improve its method of capturing the impacts of the interventions. In order to do so, it is recommended that CBLD team establish and agree on tools to capture lead farmer to farmer trainings, worker data, family labor and a market rate for their labor. Technoserve Business Advisors should then make a concerted effort to routinely check and ensure that farmer records are updated. It is also recommended that the baselines in the new communities (Malindza and Kalanga) should include household assets inventory as a benchmark for improvements and additions which may result from engaging in a value chain.

4. Share program structure with Cotton Board and Ministry of Agriculture

It is evident in the survey results that the Cotton Board and the Ministry of Agriculture extension does not provide sufficient extension services to the farmers. Therefore it is important that CBLD share the program structure and influence their work plan for sustainability purposes.

5. Farming as a business

Cotton is the one of a few cash crops that farmers can cultivate in the Lowveld. In order to reinforce good farming practices, it is recommended that refresher training should be conducted, coupled with field measurement so that farmers make calculated decisions in order for them to realize profits. It is recommended that farmers are trained using the Farming as a Business curriculum to reinforce good farming practices.

6. Savings Schemes

It is exciting that most farmers make the final decision on how their profits are used. In as much as the money is mostly used on household needs, a very small percentage of the money goes towards savings, as a result this might have negative implications during the off season. This presents a massive opportunity for the CBLD savings group program to initiate a program that will assist farmers to save money for the next growing season and teach income smoothing methods.

Annex 1

Association names and Board ID

Association Name	Male	Female	Total
No name stated		1	1
Asibemunye Farmers Association		9	9
Bambanani Farmers Association		1	1
Cathula Farmers Association		3	3
Chibini Farmers Association	3	7	10
ENjabulweni Farmers Association	3	1	4
Fobobo Farmers Association	5	14	19
Khuphuka Farmers Association	8	8	16
Lalela Farmers Association	3	5	8
LKA 150002	1		1
LKA112011	1		1
Lokhayiza Farmers Association	1	14	15
Islela		1	1
Madadeni Farmers Association	5	2	7
Magomba Farmers Association		6	6
Magwanyana Farmers Association	4	3	7
Mahhuku Farmers Association	5	12	17
Maphatsindvuku Farmers Association	1	3	4
Masibambisane Farmers Association	1	5	6
Mavalela Farmers Association	5	5	10
Mliba Farmers Association	3	2	5
Mncitsini Farmers association		2	2
Mnjoli Farmers Association	4	5	9
Mvutjini Farmers Association	3	11	14
Ndzangu farmers association		1	1
Ngcina Farmers Association		9	9
Njabulweni Farmers Association		5	5
Njojane Farmers Association	2	3	5
Nyetane Farmers Association		1	1
Phumzakhele Farmers Association	2	2	4
Puma kyle association		1	1
Sibane Farmers Association	1	3	4
Sibovini Farmers Association	2	2	4
Sikhulile Farmers Association		1	1
Sikhuphe Farmers Association	4	5	9
Skype farmers association		1	1
St Augustine Farmers Association	1	3	4
Grand Total	68	157	225